



PCT

RAW SEQUENCE LISTING

DATE: 07/16/2004

PATENT APPLICATION: US/10/501,002

TIME: 16:41:17

Input Set : A:\VPI.02.01.PCT.US.SEQ.LIS.txt

Output Set: N:\CRF4\07162004\J501002.raw

3 <110> APPLICANT: Xiaoling Xie
 5 <120> TITLE OF INVENTION: CRYSTAL STRUCTURES OF JNK-INHIBITOR COMPLEXES AND
 6 BINDING POCKETS THEREOF
 8 <130> FILE REFERENCE: VPI/02-01
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/501,002
 C--> 11 <141> CURRENT FILING DATE: 2004-07-09
 13 <150> PRIOR APPLICATION NUMBER: 60/348,002
 14 <151> PRIOR FILING DATE: 2002-01-11
 16 <160> NUMBER OF SEQ ID NOS: 7
 18 <170> SOFTWARE: PatentIn Ver. 2.1
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 422
 22 <212> TYPE: PRT
 23 <213> ORGANISM: Homo sapiens
 25 <400> SEQUENCE: 1
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 27 1 5 10 15
 29 Lys Ile Ala Phe Cys Gln Gly Phe Asp Lys Gln Val Asp Val Ser Tyr
 30 20 25 30
 32 Ile Ala Lys His Tyr Asn Met Ser Lys Ser Lys Val Asp Asn Gln Phe
 33 35 40 45
 35 Tyr Ser Val Glu Val Gly Asp Ser Thr Phe Thr Val Leu Lys Arg Tyr
 36 50 55 60
 38 Gln Asn Leu Lys Pro Ile Gly Ser Gly Ala Gln Gly Ile Val Cys Ala
 39 65 70 75 80
 41 Ala Tyr Asp Ala Val Leu Asp Arg Asn Val Ala Ile Lys Lys Leu Ser
 42 85 90 95
 44 Arg Pro Phe Gln Asn Gln Thr His Ala Lys Arg Ala Tyr Arg Glu Leu
 45 100 105 110
 47 Val Leu Met Lys Cys Val Asn His Lys Asn Ile Ile Ser Leu Leu Asn
 48 115 120 125
 50 Val Phe Thr Pro Gln Lys Thr Leu Glu Glu Phe Gln Asp Val Tyr Leu
 51 130 135 140
 53 Val Met Glu Leu Met Asp Ala Asn Leu Cys Gln Val Ile Gln Met Glu
 54 145 150 155 160
 56 Leu Asp His Glu Arg Met Ser Tyr Leu Leu Tyr Gln Met Leu Cys Gly
 57 165 170 175
 59 Ile Lys His Leu His Ser Ala Gly Ile Ile His Arg Asp Leu Lys Pro
 60 180 185 190
 62 Ser Asn Ile Val Val Lys Ser Asp Cys Thr Leu Lys Ile Leu Asp Phe
 63 195 200 205
 65 Gly Leu Ala Arg Thr Ala Gly Thr Ser Phe Met Met Thr Pro Tyr Val
 66 210 215 220



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68 Val Thr Arg Tyr Tyr Arg Ala Pro Glu Val Ile Leu Gly Met Gly Tyr
69 225                230                235                240
71 Lys Glu Asn Val Asp Ile Trp Ser Val Gly Cys Ile Met Gly Glu Met
72                245                250                255
74 Val Arg His Lys Ile Leu Phe Pro Gly Arg Asp Tyr Ile Asp Gln Trp
75                260                265                270
77 Asn Lys Val Ile Glu Gln Leu Gly Thr Pro Cys Pro Glu Phe Met Lys
78                275                280                285
80 Lys Leu Gln Pro Thr Val Arg Asn Tyr Val Glu Asn Arg Pro Lys Tyr
81                290                295                300
83 Ala Gly Leu Thr Phe Pro Lys Leu Phe Pro Asp Ser Leu Phe Pro Ala
84 305                310                315                320
86 Asp Ser Glu His Asn Lys Leu Lys Ala Ser Gln Ala Arg Asp Leu Leu
87                325                330                335
89 Ser Lys Met Leu Val Ile Asp Pro Ala Lys Arg Ile Ser Val Asp Asp
90                340                345                350
92 Ala Leu Gln His Pro Tyr Ile Asn Val Trp Tyr Asp Pro Ala Glu Val
93                355                360                365
95 Glu Ala Pro Pro Pro Gln Ile Tyr Asp Lys Gln Leu Asp Glu Arg Glu
96                370                375                380
98 His Thr Ile Glu Glu Trp Lys Glu Leu Ile Tyr Lys Glu Val Met Asn
99 385                390                395                400
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102                405                410                415
104 Ser Ala Gln Val Gln Gln
105                420
108 <210> SEQ ID NO: 2
109 <211> LENGTH: 340
110 <212> TYPE: PRT
111 <213> ORGANISM: Homo sapiens
113 <400> SEQUENCE: 2
114 Phe Tyr Arg Gln Glu Leu Asn Lys Thr Ile Trp Glu Val Pro Glu Arg
115 1                5                10                15
117 Tyr Gln Asn Leu Ser Pro Val Gly Ser Gly Ala Tyr Gly Ser Val Cys
118                20                25                30
120 Ala Ala Phe Asp Thr Lys Thr Gly Leu Arg Val Ala Val Lys Lys Leu
121                35                40                45
123 Ser Arg Pro Phe Gln Ser Ile His Ala Lys Arg Thr Tyr Arg Glu
124                50                55                60
126 Leu Arg Leu Leu Lys His Met Lys His Glu Asn Val Ile Gly Leu Leu
127 65                70                75                80
129 Asp Val Phe Thr Pro Ala Arg Ser Leu Glu Glu Phe Asn Asp Val Tyr
130                85                90                95
132 Leu Val Thr His Leu Met Gly Ala Asp Leu Asn Asn Ile Val Lys Cys
133                100                105                110
135 Gln Lys Leu Thr Asp Asp His Val Gln Phe Leu Ile Tyr Gln Ile Leu
136                115                120                125
138 Arg Gly Leu Lys Tyr Ile His Ser Ala Asp Ile Ile His Arg Asp Leu
139                130                135                140

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141 Lys Pro Ser Asn Leu Ala Val Asn Glu Asp Cys Glu Leu Lys Ile Leu
142 145 150 155 160
144 Asp Phe Gly Leu Ala Arg His Thr Asp Asp Glu Met Thr Gly Tyr Val
145 165 170 175
147 Ala Thr Arg Trp Tyr Arg Ala Pro Glu Ile Met Leu Asn Trp Met His
148 180 185 190
150 Tyr Asn Gln Thr Val Asp Ile Trp Ser Val Gly Cys Ile Met Ala Glu
151 195 200 205
153 Leu Leu Thr Gly Arg Thr Leu Phe Pro Gly Thr Asp His Ile Asp Gln
154 210 215 220
156 Leu Lys Leu Ile Leu Arg Leu Val Gly Thr Pro Gly Ala Glu Leu Leu
157 225 230 235 240
159 Lys Lys Ile Ser Ser Glu Ser Ala Arg Asn Tyr Ile Gln Ser Leu Thr
160 245 250 255
162 Gln Met Pro Lys Met Asn Phe Ala Asn Val Phe Ile Gly Ala Asn Pro
163 260 265 270
165 Leu Ala Val Asp Leu Leu Glu Lys Met Leu Val Leu Asp Ser Asp Lys
166 275 280 285
168 Arg Ile Thr Ala Ala Gln Ala Leu Ala His Ala Tyr Phe Ala Gln Tyr
169 290 295 300
171 His Asp Pro Asp Asp Glu Pro Val Ala Asp Pro Tyr Asp Gln Ser Phe
172 305 310 315 320
174 Glu Ser Arg Asp Leu Leu Ile Asp Glu Trp Lys Ser Leu Thr Tyr Asp
175 325 330 335
177 Glu Val Ile Ser
178 340
181 <210> SEQ ID NO: 3
182 <211> LENGTH: 342
183 <212> TYPE: PRT
184 <213> ORGANISM: Homo sapiens
186 <400> SEQUENCE: 3
187 Ala Gly Pro Glu Met Val Arg Gly Gln Val Phe Asp Val Gly Pro Arg
188 1 5 10 15
190 Tyr Thr Asn Leu Ser Tyr Ile Gly Glu Gly Ala Tyr Gly Met Val Cys
191 20 25 30
193 Ser Ala Tyr Asp Asn Val Asn Lys Val Arg Val Ala Ile Lys Lys Ile
194 35 40 45
196 Ser Pro Phe Glu His Gln Thr Tyr Cys Gln Arg Thr Leu Arg Glu Ile
197 50 55 60
199 Lys Ile Leu Leu Arg Phe Arg His Glu Asn Ile Ile Gly Ile Asn Asp
200 65 70 75 80
202 Ile Ile Arg Ala Pro Thr Ile Glu Gln Met Lys Asp Val Tyr Ile Val
203 85 90 95
205 Gln Asp Leu Met Glu Thr Asp Leu Tyr Lys Leu Leu Lys Thr Gln His
206 100 105 110
208 Leu Ser Asn Asp His Ile Cys Tyr Phe Leu Tyr Gln Ile Leu Arg Gly
209 115 120 125
211 Leu Lys Tyr Ile His Ser Ala Asn Val Leu His Arg Asp Leu Lys Pro
212 130 135 140

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214 Ser Asn Leu Leu Leu Asn Thr Thr Cys Asp Leu Lys Ile Cys Asp Phe
215 145 150 155 160
217 Gly Leu Ala Arg Val Ala Asp Pro Asp His Asp His Thr Gly Phe Leu
218 165 170 175
220 Thr Glu Tyr Val Ala Thr Arg Trp Tyr Arg Ala Pro Glu Ile Met Leu
221 180 185 190
223 Asn Ser Lys Gly Tyr Thr Lys Ser Ile Asp Ile Trp Ser Val Gly Cys
224 195 200 205
226 Ile Leu Ala Glu Met Leu Ser Asn Arg Pro Ile Phe Pro Gly Lys His
227 210 215 220
229 Tyr Leu Asp Gln Leu Lys His Ile Leu Gly Ile Leu Gly Ser Pro Ser
230 225 230 235 240
232 Gln Glu Asp Leu Asn Cys Ile Ile Asn Leu Lys Ala Arg Asn Tyr Leu
233 245 250 255
235 Leu Ser Leu Pro His Lys Asn Lys Val Pro Trp Asn Arg Leu Phe Pro
236 260 265 270
238 Asn Ala Asp Ser Lys Ala Leu Asp Leu Leu Asp Lys Met Leu Thr Phe
239 275 280 285
241 Asn Pro His Lys Arg Ile Glu Val Glu Gln Ala Leu Ala His Pro Tyr
242 290 295 300
244 Leu Glu Gln Tyr Tyr Asp Pro Ser Asp Glu Pro Ile Ala Glu Ala Pro
245 305 310 315 320
247 Phe Lys Phe Asp Met Glu Leu Asp Asp Leu Pro Lys Glu Lys Leu Lys
248 325 330 335
250 Glu Leu Ile Phe Glu Glu
251 340
254 <210> SEQ ID NO: 4
255 <211> LENGTH: 256
256 <212> TYPE: PRT
257 <213> ORGANISM: Mus musculus
259 <400> SEQUENCE: 4
260 Asp Gln Phe Asp Arg Ile Lys Thr Leu Gly Thr Gly Ser Phe Gly Arg
261 1 5 10 15
263 Val Met Leu Val Lys His Lys Glu Ser Gly Asn His Tyr Ala Met Lys
264 20 25 30
266 Ile Leu Asp Lys Gln Lys Val Val Lys Leu Lys Gln Ile Glu His Thr
267 35 40 45
269 Leu Asn Glu Lys Arg Ile Leu Gln Ala Val Asn Phe Pro Phe Leu Val
270 50 55 60
272 Lys Leu Glu Phe Ser Phe Lys Asp Asn Ser Asn Leu Tyr Met Val Met
273 65 70 75 80
275 Glu Tyr Val Ala Gly Gly Glu Met Phe Ser His Leu Arg Arg Ile Gly
276 85 90 95
278 Arg Phe Ser Glu Pro His Ala Arg Phe Tyr Ala Ala Gln Ile Val Leu
279 100 105 110
281 Thr Phe Glu Tyr Leu His Ser Leu Asp Leu Ile Tyr Arg Asp Leu Lys
282 115 120 125
284 Pro Glu Asn Leu Leu Ile Asp Gln Gln Gly Tyr Ile Gln Val Thr Asp
285 130 135 140

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287 Phe Gly Phe Ala Lys Arg Val Lys Gly Arg Thr Trp Thr Leu Cys Gly
288 145          150          155          160
290 Thr Pro Glu Tyr Leu Ala Pro Glu Ile Ile Leu Ser Lys Gly Tyr Asn
291          165          170          175
293 Lys Ala Val Asp Trp Trp Ala Leu Gly Val Leu Ile Tyr Glu Met Ala
294          180          185          190
296 Ala Gly Tyr Pro Pro Phe Phe Ala Asp Gln Pro Ile Gln Ile Tyr Glu
297          195          200          205
299 Lys Ile Val Ser Gly Lys Val Arg Phe Pro Ser His Phe Ser Ser Asp
300          210          215          220
302 Leu Lys Asp Leu Leu Arg Asn Leu Leu Gln Val Asp Leu Thr Lys Arg
303 225          230          235          240
305 Phe Gly Asn Leu Lys Asp Gly Val Asn Asp Ile Lys Asn His Lys Trp
306          245          250          255
309 <210> SEQ ID NO: 5
310 <211> LENGTH: 39
311 <212> TYPE: DNA
312 <213> ORGANISM: Artificial Sequence
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
317 <400> SEQUENCE: 5
318 gctctagagc tccatgggca gcaaaagcaa agttgacaa          39
321 <210> SEQ ID NO: 6
322 <211> LENGTH: 37
323 <212> TYPE: DNA
324 <213> ORGANISM: Artificial Sequence
326 <220> FEATURE:
327 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
329 <400> SEQUENCE: 6
330 tagcggatcc tcattctgaa ttcattactt ccttgta          37
333 <210> SEQ ID NO: 7
334 <211> LENGTH: 21
335 <212> TYPE: PRT
336 <213> ORGANISM: Homo sapiens
338 <400> SEQUENCE: 7
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340 1          5          10          15
342 Gln Ala Leu Leu Arg
343          20

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VERIFICATION SUMMARY

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Input Set : A:\VPI.02.01.PCT.US.SEQ.LIS.txt

Output Set: N:\CRF4\07162004\J501002.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date